



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

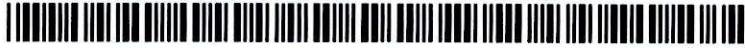
RBW6510G07131-6F
Job Sheet 198995



Part No: RBW6510G07131-6F

Job Qty: 2 pcs **6** ²¹₉₋₈₂

Part Name: Wrench Assembly #1



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 8/8/19

Job Tracking No:

Due Date: 10/22/19

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RBW6510G07131-6F Rev A IPP Rev. A 19.08.08 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier	Sign-off
					Setup Hrs	Run Hrs		
100	Small Fab - 1	2 pcs	10/22/19		0.00	0.67	Small Fab - 1	<i>Mk</i>
							Small Fab - 2	
							Small Fab - 3	
							Small Fab - 4	
							Small Fab - 5	
							Small Fab - 6	
							Small Fab - 7	
							Small Fab - 8	
110	QC 5	2 pcs	10/22/19		0.00	0.00	QC 5 - 10	<i>DAS</i> 40 NOV 2 5 2019 ⁹⁻⁸⁰
							QC 5 - 12	
							QC 5 - 17	
							QC 5 - 18	
							QC 5 - 19	
							QC 5 - 22	
							QC 5 - 24	
							QC 5 - 3	
							QC 5 - 43	
							QC 5 - 49	
							QC 5 - 51	
							QC 5 - 58	
							QC 5 - 68	
							QC 5 - 9	
							QC 5 - 50	
							QC 5 - 30	
120	Outsource - 12 - Black Oxide	2 pcs	10/22/19		0.00	0.00	ATL002-VC GR0002	<i>2019-11-26</i>
							Packaging 2 - 1 - B4B	
							Packaging 2 - 2 - B4B	
							Packaging 2 - 3 - B4B	
130	Packaging 2-1 - Receive - B4B	2 pcs	10/22/19		0.00	0.00	Packaging 2 - 1 - B4B	
							Packaging 2 - 2 - B4B	
							Packaging 2 - 3 - B4B	

Plex 8/8/19 2:53 PM Dart.lajeunesse.marie



Container No: S232332



Part: RBW6510G07131-6F

Job No: 198995

Serial No/Batch: S232332

Revision: A

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Howesbury, ON K64 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 11/15/19

				Packaging 2 - 5 - B4B	
				Packaging 2 - 4 - B4B	
				Packaging 2 - 6 - B4B	
				Packaging 2 - 7 - B4B	
				Packaging 2 - 8 - B4B	
				Packaging 2 - 9 - B4B	
				Packaging 2 - 10 - B4B	
				Packaging 2 - 11 - B4B	
				Packaging 2 - 12 - B4B	
				Packaging 2 - 13 - B4B	DP DEC 02 2019
				Packaging 2 - 14 - B4B	
				Packaging 2 - 15 - B4B	
				Packaging 2 - 16 - B4B	
				Packaging 2 - 17 - B4B	
				Packaging 2 - 18 - B4B	
				Packaging 2 - 19 - B4B	
				Packaging 2 - 20 - B4B	
				Packaging 2 - 21 - B4B	
				Packaging 2 - 22 - B4B	
				Packaging 2 - 23 - B4B	
				Packaging 2 - 24 - B4B	
				Packaging 2 - 25 - B4B	
				Packaging 2 - 26 - B4B	
				Packaging 2 - 27 - B4B	
				Packaging 2 - 28 - B4B	
				Packaging 2 - 29 - B4B	
				Packaging 2 - 30 - B4B	
				Packaging 2 - 31 - B4B	
				Packaging 2 - 32 - B4B	
				Packaging 2 - 33 - B4B	
				Packaging 2 - 34 - B4B	
				Packaging 2 - 35 - B4B	
				Packaging 2 - 36 - B4B	
140 QC 6	2 pcs	10/22/19	0.00 0.00	QC 6 - 9	
				QC 6 - 68	
				QC 6 - 61	
				QC 6 - 40	DAS DEC 03 2019 40
				QC 6 - 81	9-89
150 Packaging 3-1 - Stock - B4B	2 pcs	10/22/19	0.00 0.00	Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	DAS
				Packaging 3 - 6 - B4B	28
				Packaging 3 - 7 - B4B	9-89
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
160 QC 21 - FG	2 pcs	10/22/19	0.00 0.00	QC 21 - FG - 21	DAS DEC 04 2019 21
				QC 21 - FG - 70	GA217
				QC 21 - SA - 53	

Part Op 100 - Assemble as per DWG. See note 7 and 8.

Descriptions: 110 - QC5- Inspect part completeness to step on W/O

120 - -Issue P/O; 45219 -Black oxide finish, MIL-C-13924C Class 1 -Apply thin layer of oil/CPC per MIL-PRF-16173 Grade 3 Class 1 or MIL-c-81309 Type III Or MILL-C23411A or MIL-PRF-81309 and wipe off excess. -Material type; O1 -Certificate of Conformity is required

130 - (Pac2-Receive & Inspect for Damage & Mat'l Certs.)

140 - (QC6- All purchased or subcontracted products)

150 - The tool must be packaged with a desiccant bag into a tight fitting sealed plastic bag as per DWG.

160 - QC21- Final Inspection - Work Order Release

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
98381A502	Steel Dowel Pin, 3/16" Dia. X 5/16" Long	18 Ea (3 ea)	100-Small Fab - 1	5206696
RBW6510G07131-6F-1	Wrench	6 pcs (1 ea)	100-Small Fab - 1	522023

Job Allocations

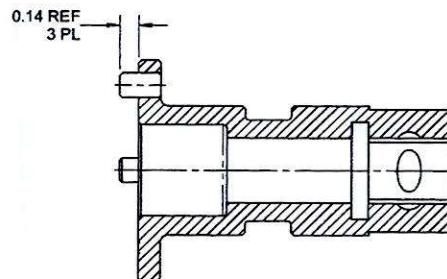
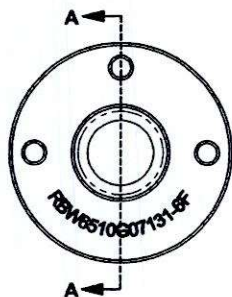
Operation	Component Part	Required	Inventory	Allocated
100-Small Fab - 1	98381A502	6	0	0
	RBW6510G07131-6F-1	2	0	0

Part Specifications

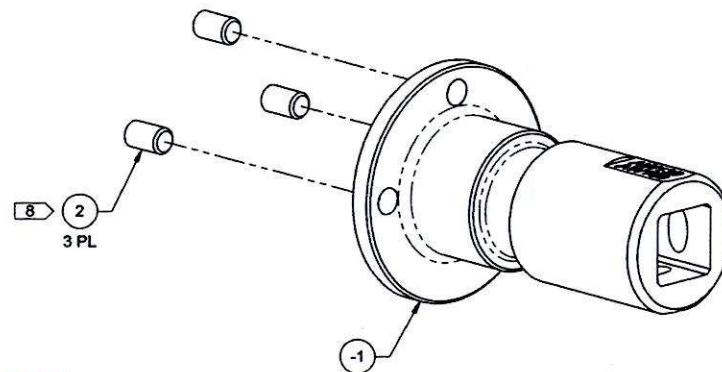
Specifications could not be found.

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ITEM #	QTY	PART #	PART TITLE
-1	1	RBW6510G07131-6F-1	WRENCH
2	3	McMaster#98381A502 OR EQUIV.	STEEL DOWEL PIN 3/16" DIA. X 5/16" LG.



SECTION A-A



RBW6510G07131-6F WRENCH ASSEMBLY #1

9

SHOP COPY
RETURN TO
ENGINEER'S
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 198955
MWS
190809

NOTES:

- 1) MATERIAL: N/A
- 2) HEAT TREAT: N/A
- 3) FINISH: BLACK OXIDE PER MIL-C-13924 CLASS 1 THEN APPLY A THIN LAYER OF OIL / CPC PER MIL-PRF-16173 GRADE 3 CLASS 1 OR MIL-C-81309 TYPE III OR MIL-C-23411A OR MIL-PRF-81309 AND WIPE OFF EXCESS
- 4) TOLERANCES: X.X = $\pm 0.1"$ / $\pm 1"$
X.XX = $\pm 0.01"$ / $\pm 0.5"$
X.XXX = $\pm 0.005"$ / $\pm 0.1"$
X.XXXX = $\pm 0.0005"$ / $\pm 0.05"$
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = $\pm 0.005"$
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) IDENTIFICATION: N/A
- 7) ASSEMBLE AS SHOWN
- 8) APPLY RETAINING COMPOUND LOCTITE 620 OR EQUIVALENT ON MATING SURFACES THEN PRESS FIT ITEM 2 FLUSH WITH SURFACE OF ITEM -1, AND REMOVE EXCESS
- 9) THE TOOL ASSY MUST BE PACKAGED WITH A DESICCANT BAG INTO A TIGHT FITTING SEALED PLASTIC BAG

A	NEW ISSUE	19-796	KPT
REV.	DESCRIPTION	ECN #	BY
DESIGN	KPT	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	KPT	TOOL PART #	REV. A
CHECKED	VM	RBW6510G07131-6F	SHEET 1 OF 2
MFG. APPR.	JFC	TITLE	SCALE
APPROVED	WJ	WRENCH ASSEMBLY #1	NTS
DATE	2019-07-03	COPYRIGHT © 2019 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

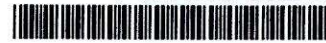
Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER POHB045219



Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

Attention: Grenon, Sylvie

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB045219

PO Date: 11/26/19

Due Date: 12/4/19

**Purchase Order
Revision:**

Revision Date:

Ship-To Contact: Guerin, Kimberley
Phone: 613-632-5200 Ext: 298
kguerin@dartaero.com

Via: Ground

Pynt Terms: Net 60

Freight Terms:

Special Comments:

E-MAILED
2019-11-27

Items

Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	202117	RB T101530-9	RB T101530 Rev A	Roller (Outside Processing - Black Oxide) -Issue PO -Material; O1 tool steel -Black oxide finish, MIL-C-13924C Class 1 -Apply thin layer of oil/CPC per MIL- PRF-16173 Grade 3 Class 1 or MIL-c- 81309 Type III Or MILL-C23411A or MIL-PRF-81309 and wipe off excess. -Material type; O1 -Certificate of Conformity is required	Firmed	-	12/4/19	8 pcs	0 pcs	8 pcs	\$1.99/pcs	\$15.92
2	203467	RBW6521A00138- W142G-3T-3	RBW6521A00138-W142G-3T Rev 1A	Remover Tool -Issue P/O: -Black oxide finish, MIL-C-13924C Class 1 -Apply thin layer of oil/CPC per MIL- PRF-16173 Grade 3 Class 1 or MIL-c- 81309 Type III Or MILL-C23411A or MIL-PRF-81309 and wipe off excess. -Material type; 4140 -Certificate of Conformity is required	Firmed	-	12/4/19	9 pcs	0 pcs	9 pcs	\$4.98/pcs	\$44.82



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PURCHASE ORDER

POHB045219



Items

Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
3	202969	RBE117-12020-W14	RBE117-12020-W14 Rev B	Mounting Ring Input Main Gear Box (Outside Processing - Black Oxide) -Issue P/O -Black oxide finish, MIL-C-13924C Class 1 -Apply thin layer of oil/CPC per MIL-PRF-16173 Grade 3 Class 1 or MIL-c-81309 Type III Or MILL-C23411A or MIL-PRF-81309 and wipe off excess. -Material type; 4140 -Certificate of Conformity is required	Firmed	-	12/4/19	8 pcs	0 pcs	8 pcs	\$8.85/pcs	\$70.80
4	198995	RBW6510G07131-6F	RBW6510G07131-6F Rev A	Wrench Assembly #1 -Issue P/O; -Black oxide finish, MIL-C-13924C Class 1 -Apply thin layer of oil/CPC per MIL-PRF-16173 Grade 3 Class 1 or MIL-c-81309 Type III Or MILL-C23411A or MIL-PRF-81309 and wipe off excess. -Material type; O1 -Certificate of Conformity is required	Firmed	-	12/4/19	6 pcs	0 pcs	6 pcs	\$4.55/pcs	\$27.30
5	202177	RBA9935	RBA9935 Rev 2	Draw Bolt (Outside Processing - Black Oxide) -Issue P/O -Black oxide finish, MIL-C-13924C Class 1 -Apply thin layer of oil/CPC per MIL-PRF-16173 Grade 3 Class 1 or MIL-c-81309 Type III Or MILL-C23411A or MIL-PRF-81309 and wipe off excess. -Certificate of Conformity is required	Firmed	-	12/4/19	8 pcs	0 pcs	8 pcs	\$1.75/pcs	\$14.00



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PURCHASE ORDER POHB045219



Items

Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
6	202702	RBW6521A00138-W142G-3T-1	RBW6521A00138-W142G-3T Rev 1A	Remover Base -Issue P/O; -Black oxide finish, MIL-C-13924C Class 1 -Apply thin layer of oil/CPC per MIL-PRF-16173 Grade 3 Class 1 or MIL-C-81309 Type III Or MILL-C23411A or MIL-PRF-81309 and wipe off excess. -Material type; 4140 -Certificate of Conformity is required	Firmed	-	12/4/19	6 pcs	0 pcs	6 pcs	\$3.98/pcs	\$23.88
Grand Total:											\$196.72	

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 11/27/19 2:26 PM Dart.Guerin.Kimberley



Certificat de Conformité / Certificate of Compliance



0 2 4 4 6 2 - 1

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

024462 - 1

Livré à / Ship to

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
02-Dec-2019		Karan Singh		POHB045219				
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/ Scrap/	À venir/ Back Order
1	RB T101530-9 Rev.A	RB T101530 OXIDE-BLK & OIL [OXIDE BLACK AND OIL] MIL-C-13924C CLASS 1 APPLY THIN LAYER OF OIL/CPC PER MIL-PRF-16173 GRADE 3 CLASS 1 OR MIL -C-81309 TYPE 3 OR MILL-C23411A OR MIL-PRF-81309 AND WIPE OFF EXCESS	OXIDE-BLACK CH	8	8	0	0	0
2	RBW6521A00138-W142G-3T-3 Rev.1A	RBW6521A00138-W142G-3T OXIDE-BLK & OIL [OXIDE BLACK AND OIL] MIL-C-13924C CLASS 1 APPLY THIN LAYER OF OIL/CPC PER MIL-PRF-16173 GRADE 3 CLASS 1 OR MIL -C-81309 TYPE 3 OR MILL-C23411A OR MIL-PRF-81309 AND WIPE OFF EXCESS	OXIDE-BLACK CH	9	9	0	0	0
3	RBE117-12020-W14 Rev.B	RBE117-12020-W14 OXIDE-BLK & OIL [OXIDE BLACK AND OIL] MIL-C-13924C CLASS 1 APPLY THIN LAYER OF OIL/CPC PER MIL-PRF-16173 GRADE 3 CLASS 1 OR MIL -C-81309 TYPE 3 OR MILL-C23411A OR MIL-PRF-81309 AND WIPE OFF EXCESS	OXIDE-BLACK CH	8	8	0	0	0
4	RBW6510G07131-6F Rev.A	RBW6510G07131-6F OXIDE-BLK & OIL [OXIDE BLACK AND OIL] MIL-C-13924C CLASS 1 APPLY THIN LAYER OF OIL/CPC PER MIL-PRF-16173 GRADE 3 CLASS 1 OR MIL -C-81309 TYPE 3 OR MILL-C23411A OR MIL-PRF-81309 AND WIPE OFF EXCESS	OXIDE-BLACK CH	6	6	0	0	0
5	RBA9935 Rev.2	RBA9935 OXIDE-BLK & OIL [OXIDE BLACK AND OIL] MIL-C-13924C CLASS 1 APPLY THIN LAYER OF OIL/CPC PER MIL-PRF-16173 GRADE 3 CLASS 1 OR MIL -C-81309 TYPE 3 OR MILL-C23411A OR MIL-PRF-81309 AND WIPE OFF EXCESS	BLACK-OXIDE CH	8	8	0	0	0

RECEIVED

DEC 02 2019

DART AEROSPACE LTD.

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BUYER:

Page 2 of 2